

# SEQUENCE LISTING

<110> Whitehouse, Martha Jo

<120> Methods and Compositions for the  
Treatment of Peripheral Artery Disease

<130> PP16090.004

<150> 60/213,504

<151> 2000-06-22

<150> 60/264,572

<151> 2000-01-26

<150> 60/276,549

<151> 2001-03-16

<160> 9

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 441

<212> DNA

<213> Bos taurus

<220>

<221> CDS

<222> (1)...(441)

<400> 1

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| cca gcc cta cca gaa gat ggg ggg tcc ggg gcc ttc cca cca ggg cac | 48 |
| Pro Ala Leu Pro Glu Asp Gly Gly Ser Gly Ala Phe Pro Pro Gly His |    |
| 1 5 10 15   |    |

|   |    |
|---|----|
| ttc aaa gat cca aaa cga cta tat tgt aaa aac ggg ggg ttc ttc cta | 96 |
| Phe Lys Asp Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu |    |
| 20 25 30  |    |

|   |     |
|---|-----|
| cga atc cac cca gat ggg cga gta gat ggg gta cga gaa aaa tcc gat | 144 |
| Arg Ile His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp |     |
| 35 40 45  |     |

|   |     |
|---|-----|
| cca cac atc aaa cta caa cta caa gcc gaa gaa cga ggg gta gta tcc | 192 |
| Pro His Ile Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser |     |
| 50 55 60  |     |

|   |     |
|---|-----|
| atc aaa ggg gta tgt gcc aac cga tat cta gcc atg aaa gaa gat ggg | 240 |
| Ile Lys Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly |     |
| 65 70 75 80   |     |

|   |     |
|---|-----|
| cga cta cta gcc tcc aaa tgt gta acc gat gaa tgt ttc ttc ttc gaa | 288 |
| Arg Leu Leu Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Phe Glu |     |
| 85 90 95  |     |

|   |     |
|---|-----|
| cga cta gaa tcc aac aac tat aac acc tat cga tcc cga aaa tat tcc | 336 |
| Arg Leu Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Ser |     |
| 100 105 110   |     |

tcc tgg tat gta gcc cta aaa cga acc ggg caa tat aaa cta ggg cca 384  
 Ser Trp Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Pro  
 115 120 125

aaa acc ggg cca ggg caa aaa gcc atc cta ttc cta cca atg tcc gcc 432  
 Lys Thr Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala  
 130 135 140

aaa tcc taa 441  
 Lys Ser \*  
 145

<210> 2  
 <211> 146  
 <212> PRT  
 <213> Bos taurus

<400> 2  
 Pro Ala Leu Pro Glu Asp Gly Gly Ser Gly Ala Phe Pro Pro Gly His  
 1 5 10 15  
 Phe Lys Asp Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu  
 20 25 30  
 Arg Ile His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp  
 35 40 45  
 Pro His Ile Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser  
 50 55 60  
 Ile Lys Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly  
 65 70 75 80  
 Arg Leu Leu Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Phe Glu  
 85 90 95  
 Arg Leu Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Ser  
 100 105 110  
 Ser Trp Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Pro  
 115 120 125  
 Lys Thr Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala  
 130 135 140  
 Lys Ser  
 145

<210> 3  
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 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(441)

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 Pro Ala Leu Pro Glu Asp Gly Gly Ser Gly Ala Phe Pro Pro Gly His  
 1 5 10 15

ttc aag gac ccc aag cgg ctg tac tgc aaa aac ggg ggc ttc ttc ctg 96  
 Phe Lys Asp Pro Lys Arg Leu Tyr Cys Lys Asn Gly Gly Phe Phe Leu  
 20 25 30

|   |     |
|---|-----|
| cgc atc cac ccc gac ggc cga gtt gac ggg gtc cgg gag aag agc gac | 144 |
| Arg Ile His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp |     |
| 35 40 45  |     |
| cct cac atc aag cta caa ctt caa gca gaa gag aga gga gtt gtg tct | 192 |
| Pro His Ile Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser |     |
| 50 55 60  |     |
| atc aaa gga gtg tgt gct aac cgt tac ctg gct atg aag gaa gat gga | 240 |
| Ile Lys Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly |     |
| 65 70 75 80   |     |
| aga tta ctg gct tct aaa tgt gtt acg gat gag tgt ttc ttt ttt gaa | 288 |
| Arg Leu Leu Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Phe Glu |     |
| 85 90 95  |     |
| cga ttg gaa tct aat aac tac aat act tac cgg tca agg aaa tac acc | 336 |
| Arg Leu Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Thr |     |
| 100 105 110   |     |
| agt tgg tat gtg gca ctg aaa cga act ggg cag tat aaa ctt gga tcc | 384 |
| Ser Trp Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Ser |     |
| 115 120 125   |     |
| aaa aca gga cct ggg cag aaa gct ata ctt ttt ctt cca atg tct gct | 432 |
| Lys Thr Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala |     |
| 130 135 140   |     |
| aag agc tga   | 441 |
| Lys Ser *   |     |
| 145   |     |

<210> 4  
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 <212> PRT  
 <213> Homo sapiens

<400> 4  
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 Arg Ile His Pro Asp Gly Arg Val Asp Gly Val Arg Glu Lys Ser Asp  
 35 40 45  
 Pro His Ile Lys Leu Gln Leu Gln Ala Glu Glu Arg Gly Val Val Ser  
 50 55 60  
 Ile Lys Gly Val Cys Ala Asn Arg Tyr Leu Ala Met Lys Glu Asp Gly  
 65 70 75 80  
 Arg Leu Leu Ala Ser Lys Cys Val Thr Asp Glu Cys Phe Phe Phe Glu  
 85 90 95  
 Arg Leu Glu Ser Asn Asn Tyr Asn Thr Tyr Arg Ser Arg Lys Tyr Thr  
 100 105 110  
 Ser Trp Tyr Val Ala Leu Lys Arg Thr Gly Gln Tyr Lys Leu Gly Ser  
 115 120 125  
 Lys Thr Gly Pro Gly Gln Lys Ala Ile Leu Phe Leu Pro Met Ser Ala  
 130 135 140  
 Lys Ser  
 145

<210> 5  
 <211> 468  
 <212> DNA  
 <213> Bos taurus

<220>  
 <221> CDS  
 <222> (1)...(468)

<400> 5  
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 1 5 10 15

ggg tcc ggg gcc ttc cca cca ggg cac ttc aaa gat cca aaa cga cta 96  
 Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp Pro Lys Arg Leu  
 20 25 30

tat tgt aaa aac ggg ggg ttc ttc cta cga atc cac cca gat ggg cga 144  
 Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg  
 35 40 45

gta gat ggg gta cga gaa aaa tcc gat cca cac atc aaa cta caa cta 192  
 Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu  
 50 55 60

caa gcc gaa gaa cga ggg gta gta tcc atc aaa ggg gta tgt gcc aac 240  
 Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn  
 65 70 75 80

cga tat cta gcc atg aaa gaa gat ggg cga cta cta gcc tcc aaa tgt 288  
 Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys  
 85 90 95

gta acc gat gaa tgt ttc ttc ttc gaa cga cta gaa tcc aac aac tat 336  
 Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr  
 100 105 110

aac acc tat cga tcc cga aaa tat tcc tcc tgg tat gta gcc cta aaa 384  
 Asn Thr Tyr Arg Ser Arg Lys Tyr Ser Ser Trp Tyr Val Ala Leu Lys  
 115 120 125

cga acc ggg caa tat aaa cta ggg cca aaa acc ggg cca ggg caa aaa 432  
 Arg Thr Gly Gln Tyr Lys Leu Gly Pro Lys Thr Gly Pro Gly Gln Lys  
 130 135 140

gcc atc cta ttc cta cca atg tcc gcc aaa tcc taa 468  
 Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser \*  
 145 150 155

<210> 6  
 <211> 155  
 <212> PRT  
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<400> 6  
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 20 25 30

Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg  
           35                          40                          45  
 Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu  
       50                          55                          60  
 Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn  
   65                          70                          75                          80  
 Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys  
                           85                          90                          95  
 Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr  
                          100                         105                         110  
 Asn Thr Tyr Arg Ser Arg Lys Tyr Ser Ser Trp Tyr Val Ala Leu Lys  
                          115                         120                         125  
 Arg Thr Gly Gln Tyr Lys Leu Gly Pro Lys Thr Gly Pro Gly Gln Lys  
       130                         135                         140  
 Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser  
   145                         150                         155

<210> 7  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(468)

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 ggc agc ggc gcc ttc ccg ccc ggc cac ttc aag gac ccc aag cgg ctg 96  
 Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp Pro Lys Arg Leu  
                           20                          25                          30  
  
 tac tgc aaa aac ggg ggc ttc ttc ctg cgc atc cac ccc gac ggc cga 144  
 Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg  
                           35                          40                          45  
  
 gtt gac ggg gtc cgg gag aag agc gac cct cac atc aag cta caa ctt 192  
 Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu  
       50                          55                          60  
  
 caa gca gaa gag aga gga gtt gtg tct atc aaa gga gtg tgt gct aac 240  
 Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn  
   65                          70                          75                          80  
  
 cgt tac ctg gct atg aag gaa gat gga aga tta ctg gct tct aaa tgt 288  
 Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys  
                           85                          90                          95  
  
 gtt acg gat gag tgt ttc ttt ttt gaa cga ttg gaa tct aat aac tac 336  
 Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr  
       100                          105                          110  
  
 aat act tac cgg tca agg aaa tac acc agt tgg tat gtg gca ctg aaa 384  
 Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp Tyr Val Ala Leu Lys  
                           115                          120                          125  
  
 cga act ggg cag tat aaa ctt gga tcc aaa aca gga cct ggg cag aaa 432

Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr Gly Pro Gly Gln Lys  
 130 135 140

gct ata ctt ttt ctt cca atg tct gct aag agc tga ttttaa  
 Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser \*  
 145 150 155

474

<210> 8  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 8  
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 Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp Pro Lys Arg Leu  
 20 25 30  
 Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg  
 35 40 45  
 Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu  
 50 55 60  
 Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn  
 65 70 75 80  
 Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys  
 85 90 95  
 Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr  
 100 105 110  
 Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp Tyr Val Ala Leu Lys  
 115 120 125  
 Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr Gly Pro Gly Gln Lys  
 130 135 140  
 Ala Ile Leu Phe Leu Pro Met Ser Ala Lys Ser  
 145 150 155

<210> 9  
 <211> 9  
 <212> PRT  
 <213> Bos taurus

<400> 9  
 Met Ala Ala Gly Ser Ile Thr Thr Leu  
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